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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A method of texturing a pixel, the method comprising:

storing a texture argument in a general purpose register of a register file;

issuing a texture command to a texture request buffer, wherein the texture command is associated with the texture argument;

retrieving the texture command from the texture request buffer;

retrieving the texture argument from the general purpose register;

executing the texture command to produce a final texture value; and

storing the final texture value in the register file.

2. (original) The method of claim 1, wherein the final texture value is stored in the general purpose register of the register file, thereby overwriting the texture argument.

3. (original) The method of claim 1, wherein the final texture value is stored in a second general purpose register of the register file.

4. (original) The method of claim 1, wherein the texture command includes a texture parameter.

5. (original) The method of claim 4, wherein the texture parameter specifies a texture mapping type.

6. (original) The method of claim 4, wherein the texture parameter specifies a texture map.

7. (original) The method of claim 4, wherein retrieving the texture argument comprises identifying the general purpose register from the texture parameter.

8. (original) The method of claim 7, wherein the texture parameter specifies the general purpose register as a destination register to store the final texture value.

9. (original) The method of claim 7, wherein the texture parameter specifies the general purpose register storing the texture argument and a second general purpose register to store the final texture value.

10. (previously presented) A method of texturing a pixel, the method comprising:

        storing a texture argument in a general purpose register of a register file;

        issuing a texture command to a texture request buffer, wherein the texture command is associated with the texture argument;

        retrieving the texture command from the texture request buffer;

        retrieving the texture argument from the general purpose register;

        executing the texture command to produce a final texture value;

        storing the final texture value in the register file;

        locking the general purpose register to prevent changes to the texture argument in response to issuing a texture command; and

        following storing the final texture value, unlocking the general purpose register.

11. (original) The method of claim 1, wherein the register file and the texture request buffer are included in a first execution unit, and wherein the method further comprises:

        repeating the steps of storing a texture argument, issuing a texture command, retrieving the texture command, retrieving the texture argument, executing the texture command, and storing the final texture value for a second execution unit including a second register file and a second texture request buffer.

12. (original) The method of claim 1, wherein the texture argument includes a set of texture coordinates.

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13. (original) A graphics processing subsystem, comprising:

an execution unit comprising a texture request buffer and a register file, the register file including a plurality of general purpose registers, wherein the execution unit is adapted to issue a texture command to the texture request buffer and to store a texture argument in the register file;

a texture unit adapted to read the texture command from the texture request buffer and to retrieve the texture argument from the register file; and

wherein the texture unit is further adapted to retrieve a portion of a texture map in response to the texture command, to compute a final texture value from the portion of the texture map, and to store the final texture value in a destination register of the plurality of registers of the register file.

14. (original) The graphics processing subsystem of claim 13, wherein the execution unit is adapted to store the texture argument in the destination register of the plurality of registers, such that the texture unit is adapted to overwrite the texture argument in storing the final texture value.

15. (original) The graphics processing subsystem of claim 13, wherein the execution unit is adapted to store the texture argument in a source register of the plurality of registers, wherein the source register is separate from the destination register.

16. (original) The graphics processing subsystem of claim 13, wherein the texture command includes a texture parameter.

17. (original) The graphics processing subsystem of claim 16, wherein the texture parameter specifies a texture mapping type.

18. (original) The graphics processing subsystem of claim 16, wherein the texture parameter specifies a texture map.

19. (original) The graphics processing subsystem of claim 16, wherein the texture unit is further adapted to determine from the texture parameter a source register of the plurality of registers storing the texture argument.

20. (original) The graphics processing subsystem of claim 19, wherein the texture parameter specifies that the destination register of the plurality of registers is also the source register of the plurality of registers.

21. (original) The graphics processing subsystem of claim 19, wherein the texture parameter specifies the source register and the destination register of the plurality of registers, wherein the source register is separate from the destination register.

22. (previously presented) A graphics processing subsystem, comprising:

an execution unit comprising a texture request buffer and a register file, the register file including a plurality of general purpose registers, wherein the execution unit is adapted to issue a texture command to the texture request buffer and to store a texture argument in the register file;

a texture unit adapted to read the texture command from the texture request buffer and to retrieve the texture argument from the register file;

wherein the texture unit is further adapted to retrieve a portion of a texture map in response to the texture command, to compute a final texture value from the portion of the texture map, and to store the final texture value in a destination register of the plurality of registers of the register file; and

wherein the execution unit is further adapted to lock the destination register to prevent changes to the texture argument in response to issuing a texture command and to unlock the destination register in response to the texture unit storing the final texture value in the destination register.

23. (previously presented) A graphics processing subsystem, comprising:

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an execution unit comprising a texture request buffer and a register file, the register file including a plurality of general purpose registers, wherein the execution unit is adapted to issue a texture command to the texture request buffer and to store a texture argument in the register file;

a texture unit adapted to read the texture command from the texture request buffer and to retrieve the texture argument from the register file;

wherein the texture unit is further adapted to retrieve a portion of a texture map in response to the texture command, to compute a final texture value from the portion of the texture map, and to store the final texture value in a destination register of the plurality of registers of the register file;

wherein the execution unit is adapted to store the texture argument in a source register of the plurality of registers, wherein the source register is separate from the destination register; and

wherein the execution unit is adapted to lock the source register to prevent changes to the texture argument in response to issuing a texture command and to unlock the source register in response to the texture unit retrieving the texture argument from the register file.

24. (previously presented) A graphics processing subsystem, comprising:

an execution unit comprising a texture request buffer and a register file, the register file including a plurality of general purpose registers, wherein the execution unit is adapted to issue a texture command to the texture request buffer and to store a texture argument in the register file;

a texture unit adapted to read the texture command from the texture request buffer and to retrieve the texture argument from the register file;

wherein the texture unit is further adapted to retrieve a portion of a texture map in response to the texture command, to compute a final texture value from the portion of the texture map, and to store the final texture value in a destination register of the plurality of registers of the register file;

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a second execution unit comprising a second texture request buffer and a second register file, the second register file including a plurality of general purpose registers, wherein the second execution unit is adapted to issue a second texture command to the second texture request buffer and to store a second texture argument in the second register file; and

wherein the texture unit is further adapted to read the second texture command from the second texture request buffer, to retrieve the second texture argument from the second register file, to retrieve a portion of a second texture map from the texture memory in response to the second texture command, to compute a second final texture value from the portion of the texture map, and to store the second final texture value in a destination register of the plurality of registers of the second register file.

25. (original) The graphics processing subsystem of claim 24, further comprising:

a multiplexer switch adapted to alternately connect the first execution unit and the second execution unit with the texture unit.

26. (original) The graphics processing subsystem of claim 25, wherein the texture unit is connected with the first execution unit and the second execution unit according to a round robin schedule.

27. (original) The graphics processing subsystem of claim 25, wherein the texture unit is connected with the first execution unit and the second execution unit according to a priority function adapted to maximize the performance of the graphics processing subsystem.

28. (previously presented) A graphics processing subsystem, comprising:

an execution unit comprising a texture request buffer and a register file, the register file including a plurality of general purpose registers, wherein the execution unit is adapted to issue a texture command to the texture request buffer and to store a texture argument in the register file;

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a texture unit adapted to read the texture command from the texture request buffer and to retrieve the texture argument from the register file;

wherein the texture unit is further adapted to retrieve a portion of a texture map in response to the texture command, to compute a final texture value from the portion of the texture map, and to store the final texture value in a destination register of the plurality of registers of the register file; and

a texture memory connected with the texture unit and adapted to store a texture map.